

WHAT IS CLAIMED IS:

1. A method for boring a hole in a circuit board, comprising the steps of:

5 a first step of acquiring a first position data for positioning the hole in said circuit board, employing a positioning device having an image pick-up function;

a second step of boring the hole in said circuit board, employing a working apparatus having an image pick-up function and a boring function, said second step further including:

10 a sub-step of acquiring a second position data for positioning said circuit board in said working apparatus, by said image pick-up function of said working apparatus;

15 a sub-step of determining the boring position on said circuit board in said working apparatus by synthesizing the first position data acquired in said first step and said second position data; and

a sub-step of boring the hole at a predetermined position in said circuit board by said boring function of said working apparatus.

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2. A method for boring a hole in a circuit board according to claim 1, wherein said circuit board has a first positioning mark that is the positional reference for boring the hole in a pattern within said circuit board, and a second positioning  
25 mark that is the positional reference of said circuit board

in said working apparatus, wherein said first step includes a sub-step of acquiring said first position data on the basis of said first positioning mark and said second positioning mark obtained by picking up the image of said first positioning mark and said second positioning mark on said circuit board by said image pick-up function of said positioning device, and

wherein said sub-step of acquiring said second position data in said second step includes acquiring said second position data on the basis of the position of said second positioning mark obtained by picking up the image of said second positioning mark on said circuit board by said image pick-up function of said working apparatus.

3. A method for boring a hole in a circuit board according to claim 1, further comprising the steps of,

a first picking up step for picking up an image of said circuit board by a first image pick-up unit provided in said positioning device,

a first data processing step for processing said first position data on the basis of the image of said circuit board obtained in said first image pick up process, and

a second moving step for moving said circuit board relative to said first image pick-up unit,

a second picking up step for picking up an image of said circuit board by a second image pick-up unit in said working

apparatus,

a second data processing step for processing said second position data on the basis of the image of said circuit board obtained by said second image pick-up unit as well as  
5 synthesizing said first position data and said second position data,

a second moving step for moving said circuit board relative to said second image pick-up unit, and

boring a hole in said circuit board on the basis of said  
10 first and second position data synthesized in said second data processing process.

4. A boring device for a circuit board comprising:

a positioning device including a first image pick-up unit  
15 for picking up an image of said circuit board, a first data processing unit for providing a first position data on the basis of said image obtained by said first image pick-up unit, and a movement unit for moving said circuit board relative to said first image pick-up unit; and

20 a working apparatus including a second image pick-up unit for picking up an image of said circuit board, a second data processing unit for providing a second position data on the basis of said image obtained by said second image pick-up unit as well as synthesizing said first position data and said second  
25 position data, a second movement unit for moving said circuit

board relative to said second image pick-up unit, and a boring unit for boring a hole in said circuit board on the basis of said first and second position data synthesized by said second data processing unit.

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